McGuire 1
1Q/2010 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: SL-IV Mar 31, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to adequately update the UFSAR for FPP documents incorporated by reference
The inspectors identified a non-cited violation (NCV) for the failure to update the Updated Final Safety Analysis Report (UFSAR) as required by 10 CFR 50.71(e) for the Fire Protection Program (FPP) documents that were incorporated by reference. This issue is in the licensee=s corrective action program as Problem Investigation Process Report (PIP) M-10-0655. The licensee intends to either provide the required updates to the referenced documents or incorporate the FPP directly into the UFSAR.

The updated information for the UFSAR was important because it identified the elements of the FPP, fire hazards analysis, and safe shutdown analysis that are a portion of the basis for the FPP. This issue was considered as traditional enforcement because it had the potential for impacting the NRC=s ability to perform its regulatory function. This issue is not minor because not having an updated portion of the UFSAR hinders the licensee's ability to perform adequate 50.59 evaluations and can impact the NRC's ability to perform adequate regulatory reviews for license amendments and inspections. Consequently, it can have a material impact on licensed activities. This issue was considered to meet the criteria for a severity level IV violation in Supplement I of the NRC Enforcement Policy because the information was not used to make an unacceptable change to the facility or procedures. This violation was not screened for associated cross-cutting aspects because it dealt with traditional enforcement. (Section 1R05)

Inspection Report# : 2010002 *(pdf)*

Significance:  Mar 31, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to adequately implement the FIre Protection Program (FPP) for the Standby Shutdown System (SSS)
The inspectors identified a Green NCV of the FPP required by 10 CFR 50.48 and License Condition 2.C.4 for failing to take adequate design control measures associated with the addition of the standby shutdown system (SSS) for both Units. Specifically, the licensee failed to include a fire hazards analysis (FHA) in the FPP for the SSS, and failed to enter the SSS into the quality assurance program (QAP). The licensee performed a functionality assessment for the area where the SSS is located. The licensee intends to add the SSS to the FHA and the QAP. In addition, any previous modifications made to the SSS will be reviewed and corrective action taken as appropriate.

The performance deficiency was greater than minor because it affected the Mitigating Systems Cornerstone objective of availability, reliability, and capability of the post-fire safe shutdown (SSD) systems and is associated with the design control and protection against external factors (fire) attributes. Specifically, there was no FHA that demonstrated the availability and capability that at least one SSD train would be free of fire and capable of performing safe shutdown as required by 10 CFR 50.48, (a)(2)(iii). The issue was determined to be of very low safety significance (Green) using IMC 0609, Appendix F, Attachment 1, based on the fact that the categories of Fire Prevention and Administrative Controls, and post-fire SSD, were evaluated as having low degradation. There was no cross-cutting aspect associated with this performance deficiency because it was not representative of current licensee performance. (Section 1R18)
Inspection Report# : 2010002 *(pdf)*

Significance: G Mar 31, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to flow test nuclear service water "A" train standby nuclear service water pond (SNSWP) supply header at maximum design.
A self-revealing Green NCV of 10 CFR 50, Appendix B, Criterion XI, Test Control, was identified for the licensee's failure to flow test the Nuclear Service Water System (NSWS) "A" Train Standby Nuclear Service Water Pond (SNSWP) unit common supply header at maximum design flow. The licensee entered this issue into their corrective action program as PIP M-09-2216 and has taken corrective actions to increase the minimum required flow velocity, frequency, and duration of the "A" Train SNSWP unit common supply header test procedure.

The finding was more than minor because it affected the cornerstone attributes of "protection against external events" and "equipment performance" and the Mitigating Systems objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, inadequate flushing of the "A" Train SNSWP unit common supply header led to ineffective flushes and the accumulation of corrosion products which challenged the design function of the NSWS system. This finding was evaluated using IMC 0609, Attachment 4, Phase I - Initial Screening and Characterization of Findings, to determine the safety significance. Since the finding was related to a seismic initiating event, a Phase III was required to be performed by an NRC Senior Risk Analyst. The Phase III analysis calculated the risk increase to be less than 1E-7 for both conditional core damage probability and conditional large early release probability, resulting in a determination of very low risk significance (Green). This performance deficiency was associated with the cross-cutting aspect of complete, accurate and up-to-date design documentation and procedures [H.2(c)] as described in the Resources component of the Human Performance cross-cutting area. (Section 4OA3.1)

Inspection Report# : 2010002 *(pdf)*

Significance: SL-IV Sep 30, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to adequately update the UFSAR for emergency diesel fuel oil storage tank requirements (Section 1R22)
The inspectors identified a Severity Level IV non-cited violation (NCV) of 10 CFR 50.71(e) for failure to adequately update the Updated Final Safety Analysis Report (UFSAR) for a license amendment to the emergency diesel generator (EDG) fuel oil storage tank requirements. The licensee intends to revise the UFSAR to reflect the licensing basis described in the license amendment and is developing procedural guidance for cross-connecting the fuel oil storage tanks.

This finding was considered as traditional enforcement because it had the potential for impacting the NRC's ability to perform its regulatory function. The inspectors used the NRC Enforcement Policy, Supplement I, to determine that the issue was more than minor because not including the new licensing basis for the safety-related fuel oil storage tanks in the UFSAR would have a material impact on licensed activities associated with this equipment. This issue was considered a Severity Level IV violation because the inaccurate information was not used to make an unacceptable change to the facility. No cross-cutting aspect was identified. (Section 1R22)

Inspection Report# : 2009004 *(pdf)*

Significance: G Jun 30, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Adequately Implement Design Control Measures For Fire Protection
Green: A non-cited violation of License Condition 2.C.4, Fire Protection Program (FPP), was identified for inadequate design control measures associated with the downgrading of a 3-hour rated fire barrier between the electrical penetration room and essential switchgear room for each train in both Units. The licensee failed to update the fire strategy plans and the design basis documents, including the fire protection program plan, the fire hazards analysis, and the safe shutdown analysis, to reflect the new fire confinement configurations. The licensee intends to

perform the fire hazards analysis and revise the design documents and the fire strategy plans.

This finding is more than minor because it affected the Mitigating Systems Cornerstone objective of availability, reliability, and capability of the fire confinement and fire suppression systems and was associated with the design control and protection against external factors (fire) attribute in that this failure could affect the ability to respond to a fire. The issue was determined to be of very low safety significance (Green) based on the fact that the categories of Fire Prevention and Administrative Controls, and Fire Confinement, were evaluated as having low degradation because the failure to adequately perform design control measures in support of the modification was mitigated by the fact that the fire barrier was not actually removed; would likely have performed it's intended function; and that the inspectors' review of the equipment and actions for each of the combined areas indicated that safe shutdown for a fire in the combined areas could be accomplished from either the other redundant train or the alternate safe shutdown facility (both located in other fire areas). There is no cross cutting aspect with this performance deficiency because it was not representative of current licensee performance in that it was a human performance error that occurred 10 years ago. (Section 1R05)
Inspection Report# : 2009003 *(pdf)*

Significance: G Jun 30, 2009
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Procedures Not Appropriate to the Circumstances for A Train RN Temporary Testing
Green: A self-revealing non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, Instructions, Procedures, and Drawings, was identified for the failure to provide procedures appropriate to the circumstances. The temporary test procedure for flow testing the A Train of nuclear service water (RN) failed to provide adequate pump suction strainer backwash capability resulting in the macrofouling of the 2A RN pump suction strainer. This issue has been entered into the licensee's corrective action program as Problem Investigation Process (PIP) report M-09-02216.

This finding is more than minor because it rendered the 2A RN pump unavailable and affected the availability, reliability, and capability of the RN system (ultimate heat sink), and was related to the external events, configuration control, equipment performance and procedure quality attributes of the Mitigating Systems cornerstone. The finding was determined to be of very low safety significance (Green) because it did not result in a loss of a single train of RN for greater than its Technical Specification (TS) allowed outage time. This finding has a cross-cutting aspect of conservative assumptions [H.1(b)] as described in the Decision-Making component of the Human Performance cross-cutting area, because the licensee's assumption, that macrofouling of the RN pump suction strainers was not a concern while aligned to the standby nuclear service water pond, was non-conservative. (Section 1R13)
Inspection Report# : 2009003 *(pdf)*

Significance: SL-IV Jun 30, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Correct Ultimate Heat Sink LIcensing Basis Document Inaccuracies
SLIV: A non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action, was identified for failing to adequately identify and correct ultimate heat sink licensing basis document inaccuracies.

The finding is more than minor because the failure to have an accurate description of the ultimate heat sink (UHS) in the licensing basis documents had a material impact on licensed activities. In addition, an accurately defined UHS is necessary to adequately assess plant modifications, operability determinations, and technical specification entry conditions. This issue was treated as traditional enforcement because it had the potential for impacting the NRC's ability to perform its regulatory function. This finding was characterized as a Severity Level IV violation because the NRC determined the standby nuclear service water pond met the requirements of Regulatory Guide (RG) 1.27 in the Safety Evaluation Report (SER) and it does not result in a condition evaluated as having low to moderate, or greater safety significance (i.e., white, yellow, or red). This finding has a cross-cutting aspect of corrective action [P.1(c)] in the Corrective Action Program component of the Problem Identification and Resolution cross-cutting area because the licensee failed to thoroughly evaluate this issue such that the resolutions addressed all the causes and extent of conditions, as necessary. (Section 1R15)
Inspection Report# : 2009003 *(pdf)*

Significance: G Jun 18, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Procedure for RN System Flow Balancing
The team identified a finding of very low safety significance involving a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to provide adequate procedures for flow balancing of the service water (RN) system. The RN flow balance procedure was inadequate in that it made no provision in the acceptance criteria to limit or evaluate minimum flow control valve seat/disc clearance, and subsequent potential for increased flow obstruction, resulting from system flow balancing. The licensee entered this deficiency into their corrective action program (CAP) for resolution.

The finding was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of procedure quality and affected the cornerstone objective of ensuring the capability of systems that respond to initiating events to prvent undesirable consequences. Specifically, changing position of the flow control valves without consideration of potential flow obstruction could impact the capability to adequately cool safety related equipment. The team assessed this finding for significance in accordance with the SDP for Reactor Inspection Findings for At-Power Situations, and determined that it was of very low safety significance (Green), in that no actual loss of safety system function was identified. No cross-cutting aspect was identified because the performance deficiency did not reflect current performance.
Inspection Report# : 2009006 *(pdf)*

Significance: G Jun 18, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Correctly Translate Design Basis Information Related to the Isolation Time for Safety Related MOVs into Instructions and Procedures
The team identified a finding of very low safety significance involving a NCV of 10 CFR 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to assure that the applicable design bases were correctly translated into the in-service test (IST) acceptance criteria for safety-related motor operated valves (MOVs). Specifically, the licensee's testing did not account for test inaccuracies associated with limit switch actuation or minimum EDG frequency into IST stroke time testing. The licensee entered this deficiency into their CAP for resolution.

The finding was determined to be more than minor because it was associated with the Mitigating Systems cornsertone attribute of design control and affected the cornerstone objective of ensuring the capability of systems that respond to initiating events to prevent undesirable consequences. Not accounting for test inaccuracies and EDG under frequency, the IST did not ensure that MOV isolation times referenced in the Updated Final Safety Analysis Report (UFSAR) were verified by testing. The team assessed this finding for significance in accordance with the SDP for Reactor Inspection Findings for At-Power Situations and determined that it was of very low safety significance (green), in that no actual loss of safety system function was identified. No cross-cutting aspect was identified because the performance deficiency did not reflect current performance.
Inspection Report# : 2009006 *(pdf)*

Significance: G Jun 18, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Verification of the Design Adequacy of the Control Circuit Voltage for 600 VAC Safety Related Motors
The team identified a finding of very low safety significance involving a NCV of 10 CFR 50, Appendix B, Criterion III, "Design Control," for failure to establish measures to verify the design capability of the control circuit voltage for 600 VAC safety related motors fed from motor control centers. Specifically, there was no voltage drop calculation or cable configuration specification for the control circuits that established the adequacy of the control circuit to energize the safety related motors. The licensee entered this deficiency into their CAP for resolution.

The finding was more than minor because it was associated with the design control attribute of the Mitigating Systems

cornerstone and affected the cornsertone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Due to the lack of appropriate analysis, the 600V motor control circuit design basis accident capability was not assured and further evaluation was required to demonstrate that the equipment could perform its safety function. The team assessed this finding for significance in accordance with the SDP for Reactor Inspection Findings for At-Power Situations, and determined that it was of very low safety significance (Green), because it was a design deficiency determined not to have resulted in the loss of safety function. No cross-cutting aspect was identified because the performance deficiency did not reflect current performance.
Inspection Report# : 2009006 *(pdf)*

Barrier Integrity

Significance: G Jun 30, 2009
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Untimely Corrective Actions for Containment Isolation Valve Inadequate Closing Margins
Green: A self-revealing non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action, was identified for untimely corrective action for containment isolation valves (CIVs) which could spuriously open during an event requiring containment isolation. Specifically, the licensee had not completed an extent of condition review, from a previously reported event, to identify other CIVs which could spuriously open. The licensee immediately declared the Unit 1 CIVs inoperable and took actions through plant modifications and procedural alignment changes necessary to restore operability. CIV operability was not required because Unit 2 was in Mode 5, but similar changes were made on Unit 2 CIVs prior to Unit 2 re-entering Mode 4 when CIV operability was required.

This finding is more than minor because it affects the availability, reliability, and capability of the containment in that CIVs may not remain closed when required during design basis accidents and is related to the containment isolation attribute of the Barrier Integrity cornerstone. Because the 2008 CIV deficiency revealed itself through a change in functionality of equipment, this issue is considered self-revealing. The violation was determined to be of very low safety significance (Green) in IMC 0609 SDP Phase 1 screening based on the penetrations involved closed piping within containment such that even if both the inboard and outboard CIVs were to open, a significant breach in the piping would need to occur to provide a viable release pathway. This finding has a cross-cutting aspect of procedures [H.2(c)] in the Resources component of the Human Performance cross-cutting area because the licensee's corrective action program procedures failed to establish timeliness criteria for the reviews. (Section 4OA3).
Inspection Report# : 2009003 *(pdf)*

Emergency Preparedness

Significance: G Dec 21, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Biennial exercise was not an adequate test
The inspectors identified a Green NCV of 10 CFR50.47(b)(14) for failure to conduct a biennial exercise that was technically accurate and challenging, to the extent that it was not an adequate test of the plans, procedures, equipment, and implementation of the licensee's emergency response capabilities. The licensee
entered the deficiency into their corrective action program, as Problem Investigation Process (PIP) M-09-04560, M-09-05183, and M-09-05186, and planned to conduct a re-demonstration drill in May 2010. This finding is greater than minor because it is associated with the Emergency Response Organization Performance attribute of the Emergency Preparedness Cornerstone, in that a biennial exercise that is not technically accurate and
challenging is not an adequate test of the plans, procedures, equipment, and implementation of the licensee's emergency response capabilities. The finding does not represent an immediate safety concern. This finding was

evaluated using the Emergency Preparedness SDP and determined to be a finding of very low safety significance because there was no loss of planning standard function. The cause of the finding was directly related to the cross-cutting component of work practices in the area of Human Performance, because the licensee did not ensure the supervisory and management oversight of work activities supported nuclear safety [H.4(c)]. (Section 1EP1)
Inspection Report# : 2009501 *(pdf)*

Occupational Radiation Safety

Significance: G Sep 30, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to properly calibrate area radiation monitors (Section 2OS3)
The inspectors identified a Green non-cited violation (NCV) of 10 CFR 20.1501(b) for the licensee's failure to ensure that area radiation monitors (ARMs) used for quantitative measurements were calibrated. The licensee failed to complete the detector sensitivity verification with an appropriate radioactive source during the previous two calibrations of the reactor coolant (NC) filter area ARMs. The licensee initiated Problem Investigative Process (PIP) M-09-4036 to evaluate this issue.

The finding is greater than minor because it was associated with the Occupational Radiation Safety cornerstone attribute of Plant Facilities/Equipment and Instrumentation and adversely affected the cornerstone objective in that the failure to properly calibrate the ARMs could compromise the evaluation of radiological hazards causing unintended dose to radiation workers. The finding was determined to be of very low safety significance (Green) because it was not related to ALARA planning, did not involve an overexposure or substantial potential for overexposure, and did not compromise the ability to assess dose. The finding had a cross-cutting aspect of "maintaining long term plant safety" in the area of Human Performance, under the Resources component, because the licensee did not ensure procedures and other resources were available and adequate to assure nuclear safety by maintenance of design margins (i.e. appropriate calibration) and minimization of preventative maintenance deferrals (i.e. allowing for critical steps to be marked N/A, effectively deferring the calibration until the next calibration cycle) [H.2(a)]. (Section 2OS3).

Inspection Report# : 2009004 *(pdf)*

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the cover letters to security inspection reports may be viewed.

Miscellaneous

Last modified : May 26, 2010